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2. ON A RECORD SPECIMEN OF GREY-HEADED GIANT FLYING SQUIRREL *PETAURISTA CANICEPS* GRAY, FROM ARUNACHAL, PRADESH WITH A NOTE ON ITS TAXONOMY

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The genus *Petaurista* is the most diverse among the flying squirrels. It has seven recognized species in India. These are the Red or Common Giant Flying Squirrel *Petaurista petaurista*, Indian Giant Flying Squirrel *P. philippensis*, Grey-headed Giant Flying Squirrel *P. caniceps*, Hodgson's Giant Flying Squirrel *P. magnificus*, Bhutan or Orange Giant Flying Squirrel *P. nobilis*, Mechuka Giant Flying Squirrel *P. mechukaensis* and Mishmi Hills Giant Flying Squirrel *P. mishmiensis*. However, a stable taxonomy for the giant flying squirrels of the genus *Petaurista* Link, 1795 remains elusive mainly owing to lack of sufficient specimens (as many of them live in remote mountains with difficult accessibility, hence, relatively fewer collection of several species). This is evident from the fact that two new species have been described recently from Arunachal Pradesh (Choudhury 2007, 2009a, b). I here report of a specimen of Grey-headed Giant Flying Squirrel *P. caniceps* Gray, from the same state, which appeared to be much larger than it is known.

P. caniceps was described from a specimen obtained in Nepal (Gray 1842). Ellerman and Morrison-Scott (1966) and Hoffmann *et al.* (1993) included it in *P. elegans*. It was reviewed by Corbet and Hill (1992) who upgraded it to a full species level. Ellerman (1961), while including it in *P. elegans*, had also considered the following forms as subspecies of *P. elegans* – *clarkei* and *gorkhali*, which are now synonyms of *caniceps*. The maximum total length recorded for *caniceps* was 77 cm with tail slightly longer than head-and-body

(Corbet and Hill 1992).

In November 2002, I examined a skin of a male, which was killed about 2-3 months ago at Mechuka (28° 36' N; 94° 08' E) in West Siang district, Arunachal Pradesh. The elevation of Mechuka is 1,900 m above msl. The specimen measured 86 cm (total length, up to hair-tip at tail-end). Although it was in excellent condition, the head-and-body and tail lengths could not be measured separately with accuracy, as in flying squirrels the interfemoral membrane makes it difficult to determine the base of the tail unless the bone at the base remains intact (in this case the bone was absent).

It had a conspicuous grey head with a light rufous 'ring' around the eyes and a rich rufous patch around (posteriorly) the ears. Cheeks are also grey. There was a narrow black patch above the nose. Nostrils were light grey with a blackish median line. Dorsally it was almost uniform rufous brown. Black-tipped hairs could be seen anteriorly. Base of hair grey, which was prominent on the dorsum. Sides of parachute and upper portion of limbs were uniform rich rufous. Tail was similarly coloured as dorsum, but a black tip and an irregular line almost up to the base were noteworthy.

Ventrally, it was light rufous-buff with a slightly darker rufous median line from throat to lower abdomen. Parachute was rich rufous. Throat was conspicuous white while lower abdomen including genital region looked grey with buff. Tail was similarly coloured as dorsa, also with a black tip and an irregular line. On closer examination, some hairs in the anterior half of the tail had black at the centre with rufous

tip, thus giving an overall rufous-brown effect. Feet were greyish-brown. This is the largest recorded specimen of *P. caniceps* so far.

The specimen is deposited at the national collections, Zoological Survey of India (Registration No. is ZSI 26087).

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3. THE NORTHERNMOST RANGE OF GAUR *BOS GAURUS* H. SMITH AND WILD WATER BUFFALO *BUBALUS ARNEE* KERR

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The Gaur *Bos gaurus* H. Smith and Wild Water Buffalo *Bubalus arnee* (= *bubalis*) Kerr are large bovids; their current range is confined to mainland South and South-east Asia (Corbet and Hill 1992; Choudhury 2002, 2010). While the Gaur is more widespread and still has large populations in India, Bhutan, Myanmar, Thailand, Cambodia, Vietnam and Peninsular Malaysia (small populations in Nepal, China and Bangladesh), the Wild Water Buffalo is found in relatively small numbers, that too highly fragmented, in India, Nepal, Bhutan, Thailand and Cambodia (doubtfully in Myanmar) (Schaller 1967; Lekagul and McNeely 1977; Prater 1980; Corbet and Hill 1992; Choudhury 1994a,b, 2002, 2010; Groves 1996; IUCN 2009) (Fig. 1). In this short note, I discuss the northern limit of distribution of these bovids. Interestingly, the northernmost range limit of Gaur and Wild Water Buffalo is similar.

The Gaur ranges from the southernmost tip of India towards northern Western Ghats (well inside Maharashtra), to the plateau of Central India, Himalayan foothills from Nepal eastwards to Vietnam and up to Peninsular Malaysia (Dunbar Brander 1923; Hubback 1937; Gee 1952; Daniel

and Grubb 1966; Choudhury 1994a, 2002; Duckworth *et al.* 1999). In South-east Asia, the northernmost populations are in southern China (Yunnan province) (c. 25° 00' N) (Smith and Xie 2008). Their range map indicates that their western limit was dry desert (during Indus Valley civilization it was apparently further west as Gaur appears in the seals of that period), to the south and east is the sea; while towards north are the high snow-capped mountains. The highest elevation where the Gaur has been recorded during this study was above 2,700 m in summer (near Chaku, Eagle Nest Wildlife Sanctuary), West Kameng district, Arunachal Pradesh. The Himalayas are above 5,000 m elevation and act as an impenetrable barrier. East of the Himalaya, are the Mishmi Hills, Gaoligong Shan, and other such high mountains, which have also prevented its northward spread. The northernmost area of its range lies in the Mishmi Hills, Lower Dibang Valley district, Arunachal Pradesh (Choudhury 1999); however, subsequent research in East and Upper Siang districts of Arunachal Pradesh revealed that it occurs farther north. The northernmost area of distribution of the Gaur is around Geku (c. 28° 30' N) in Upper Siang district. Historically, it perhaps